

**REMARKS**

Claims 1-28 were pending in this application.

Claims 1, 10, 15, and 24 have been rejected.

Claims 2-9, 11-14, 16-23, and 25-28 have been objected to.

Claims 1 and 15 have been amended as shown above.

Claims 29-38 have been added.

Claims 1-38 are now pending in this application.

Reconsideration and full allowance of Claims 1-38 are respectfully requested.

**I. ALLOWABLE CLAIMS**

The Applicant thanks the Examiner for the indication that Claims 2-9, 11-14, 16-23, and 25-28 would be allowable if rewritten in independent form to incorporate the elements of their respective base claims and any intervening claims. Because the Applicant believes that the remaining claims in this application are allowable, the Applicant has not rewritten Claims 2-9, 11-14, 16-23, and 25-28 in independent form.

**II. REJECTION UNDER 35 U.S.C. § 102**

The Office Action rejects Claim 1 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,339,050 to Llewellyn ("*Llewellyn*"). This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as

they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

*Llewellyn* recites a phase locked loop (PLL) frequency synthesizer. (*Abstract*). The PLL frequency synthesizer includes a feedback divider (element 206), which has a “division factor M.” (*Col. 5, Lines 15-19*). The PLL frequency synthesizer also includes a feedforward divider (element 202), which has a “division factor N.” (*Col. 5, Lines 15-19*). *Llewellyn* adjusts a current using the division factor M, the division factor N, or both. (*Col. 4, Line 3 – Col. 5, Line 45*).

Claim 1 has been amended to recite a “loop response control circuit” capable of adjusting a value of a charge pump current ( $I_c$ ) based at least partially on “one of a first plurality of ranges in which said first divider value lies” and/or “one of a second plurality of ranges in which said second divider value lies.”

The Office Action fails to show that *Llewellyn* anticipates these elements of Claim 1. In particular, *Llewellyn* simply recites that a current may be adjusted based on the actual values of one or more division factors (N and M). *Llewellyn* contains no mention of adjusting a charge pump current based on which of a “first plurality of ranges” one division factor lies and/or which of a “second plurality of ranges” another division factor lies. As a result, *Llewellyn* fails to anticipate adjusting a charge pump current based on at least one of “one of a first plurality of ranges in which said first divider value lies” and “one of a second plurality of ranges in which

said second divider value lies” as recited in Claim 1.

For these reasons, the Office Action has not shown that *Llewellyn* anticipates the Applicant’s invention as recited in Claim 1. Accordingly, the Applicant respectfully requests withdrawal of the § 102 rejection and full allowance of Claim 1.

### III. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 10, 15, and 24 under 35 U.S.C. § 103(a) as being unpatentable over *Llewellyn* in view of U.S. Patent No. 5,420,545 to Davis et al. (“*Davis*”). This rejection is respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870,

873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

As described above in Section II, Claim 1 is patentable. As a result, Claim 10 is patentable due to its dependence from an allowable base claim.

Claim 15 recites a “loop response control circuit” capable of adjusting a value of a charge pump current ( $I_c$ ) based at least partially on “one of a first plurality of ranges in which said first divider value lies” and/or “one of a second plurality of ranges in which said second divider value lies.” As described above in Section II, the Office Action does not show that *Llewellyn* discloses, teaches, or suggests these elements of Claim 15. The Office Action does not show that *Davis* discloses, teaches, or suggests these elements of Claim 15. As a result, the Office Action has not shown that the proposed *Llewellyn–Davis* combination discloses, teaches, or suggests all elements of Claim 15.

For these reasons, the Office Action has not established a *prima facie* case of obviousness against Claim 15 (and Claim 24 depending from Claim 15).

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection and full allowance of Claims 10, 15, and 24.

**IV. NEW CLAIMS**

The Applicant has added new Claims 29-38. The Applicant respectfully submits that no new matter has been added. The Applicant respectfully requests entry and full allowance of Claims 29-38.

**V. CONCLUSION**

As a result of the foregoing, the Applicant asserts that all pending claims in this application are in condition for allowance and respectfully requests full allowance of the claims.

**SUMMARY**

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to Davis Munck, P.C. Deposit Account No. 50-0208.

Respectfully submitted,

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